	Contents	Reference to last Measurement
1	7	8

M. A. R. 57 (Rule 116)
Measurement Book

No. B 498718

Serial No. 1st and Final Bill

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Name of work : Maintenance of ward & Emergency works in WW.10.						
	Est cost : 20.00 Lakhs.						
	Job code / Indent No: 010-18-000037/34900						
	P-Code : P-1771						
	Approved tender price: 1752543.00						
	Name of Agency: B. Girish No 227, 32 A cross, 7th Block, Jayanagara Blore-11.						
	W/o Reference: BBMP/EE/BTP/WO/23/2019-20 dt: 22.05-2019.						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Unit	Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO 01: Geophysical investigation of site for sinking borewell for supplying drinking water to the habitation either thro' the hand pump, MWS of PWSS by vertical electrical sounding by adopting Verrer or Schlumberger's method including reconnaissance survey of geological formation etc. complete as per specifications & as per directions of the EIC of the work.						
	NO	1			1		
	@ RS 1800						1800.00
	Item NO 02: Sinking borewell of 165 mm ϕ clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in						

K

epth 6	Contents 7	Reference to last Measurement 8
i for sinking borewell n either thro' the rical sounding by including reconnaissance te as per specifications		
1		
		1800.00
lear using super fast CFM & above in		

M. A. R. 57 (Rule 116)
Measurement Book

No. B 498719

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Unit	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	all strata including overburden upto 20mts fixing of casing pipes, collars & cap with necessary cutting, threading & welding with necessary cutting welding including transportation of rig & supporting vehicles, crew charges etc., complete as per specification & as per directions & cost of consumables of Etc of the work.	Rm						
	Item No 02 - 0 to 50 m		1	50.00			50.00 @ Rs 290.00 = 14500.00	
	Item No 03 - 50 to 100 m		1	50.00			50.00 @ Rs 380.00 = 19000.00	
	Item No 04 - 100 to 150 m		1	50.00			50.00 @ Rs 420.00 = 21000.00	
	Item No 05 - 150 to 200m		1	50.00			50.00 @ Rs 450.00 = 22500.00	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	IN-06 - 200 to 250m	1	50		=	50 m @ Rs 520 = 26000.00	
	IN-07 - 250 to 300m	1	50		=	50 m @ Rs 570 = 28500.00	
	Item No 08: Supply of IS mark 175mm nominal bore medium black ERW casing pipe of 5mm thick black electric resistance continous welded mild steel tube material conforming to IS 1387/1993 & manufactured from hot rolled steel skelp/stripes in random length of 4 to 7 mts both ends threaded conforming to IS 554/1985, one end fixed with a socket & the other & with a plastic protection end (including of all taxes) with all lead & lift, loading, unloading & labour charges etc., complete & as per the						

nts	Reference to last Measurement 8
2 @ Rs 520 = 26000.00	
@ Rs 570 = 28500.00	
medium	
resistance	
to IS	
stripes in	
iring to	
& with a	
lead & lift,	
per the	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 498720

Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work 2	Unit	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	direction of the EIC of the work.							
		Rm	1	70m			70m	
	@Rs1200/-						=	84000.00
	Item No 09: Providing 250 mm ϕ PVC pipe 6kg/cm as per Specification & direction of the EIC of the work.							
		Rm	1	18.00				
	@ Rs 1000.00						=	18000.00

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Unit	Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO 10: Providing & fixing 160 mm borewell cap, with all lead & lift, loading, unloading & labour charges etc, complete & as per the directions of the EIC & the work						
	NO	1				1	
	@ Rs 100.00					=	100.00
	Item NO 11: Supply & delivery at site brand new texmo/innoval Lubi/Sabar/Atlanta/Calamad/ make suitable for vertical installation in 150 mm ϕ borewell comprising of single stage or multistage CF pump close coupled by means of SS coupling to suitable HP						

	Contents 7	Reference to last Measurement 8
well cap, with all charges etc, complete	1 = 100.00	
new termo/innoval or vertical installation or multistage to suitable HP		

M. A. R. 57 (Rule 116)
Measurement Book

No. B 498721

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
Unit- suitable speed totally enclosed & filled with pure drinking water etc complete as per specifications & directions of the EIC of the work.						
NO @ Rs 53400.00	1				1 = 53400.00	
Item NO 12: Providing & fixing in trenches galvanised mild steel tubes (medium grade) 50mm ϕ nominal bore with all fittings including cost of all materials labour charges etc., complete as per specifications & as per the directions of the EIC of the work						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Unit	Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
		Rm	1	270.00		270.00	
	@ Rs 420.00						113400.00
	Item No 13: Heavy duty collar 50 mm ϕ						
		No	45			45	
	@ Rs 130.00						5850.00
	Item No 14: Supplying & drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor conforming to table 3 class 5 of IS 8130-1984 etc., complete as per the specification & as per the directions of the						

M. A. R. 57 (Rule 116)
Measurement Book

No. B

498722

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Contents	Reference to last Measurement
7	8
270.00	
	113400.00
45	
	5850.00
sheathed submersible	
copper with	
class 5 of IS 8130-1984	
the directions of the	

Date	Full description, etc, of work	Unit	Dimensions: Number	Length	Breadth	Depth	Contents	Reference to last Measurement
1	2		3	4	5	6	7	8
	Etc of the work.		1×2 =	280				
		m	1560.00	~~×560.00~~			= 560.00	
	@ Rs 145.00							81200.00
	Item No 15: Labour charges for erection as new/repaired Submersible pump set along with GI pipe (32/50mm) cable etc. complete as per specification & as per the direction of the Etc of the work.							
		Per length	1	45			45	
	@ Rs 66.00							2970.00

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	unit	Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item No 16: Supplying & fixing 20x20x2.5 polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces & fixing the same to the wall etc. complete as per specifications & as per directions of EIC of the work.						
	Each	1				1	
	@ Rs 280.00						280.00
	Item No 17: Supplying of LTUG (1.1KV) cable having aluminium conductor PVC insulated shelted, galvanised steel, wire/steel tape armoured cable with PVC outer sheathing 1.1 KV class with all lead & lugs etc. complete as per specifications & as per directions of the EIC of the work.						

nts	Reference to last Measurement 8
wood board	
ls with	
g the same	
- directions	
	280.00
minium conductor	
ound cable	
etc.	
& the work.	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 498723

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work 2	Unit	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	m	1	35.00			35	
@ Rs 120.00						—	4200.00
Item No 18 : Labour charges for laying of 1.1 kV class UG cable etc., complete as per specification & as per direction of the Engr of the work							
	m	1	35.00			35.00	
@ Rs 8.80						—	308.00
Item No 19 : Digging or trenching of 0.6m x 0.5m wide refilling the trench to the required ground level & consolidating etc., complete as per specifications & as							

MEASUREMENT BOOK

Date	Full description, etc, of work	Unit	Dimensions				Contents	Reference to last Measurement
			Number	Length	Breadth	Depth		
1	2		3	4	5	6	7	8
	per directions of the EIC of the work.							
		m	1	30			30.00	
	@ Rs 75-00						—	2250
	Item No 20: Supplying & fixing of class A (Medium duty) GI pipe of wall Thickness not less than 3.25 mm on pole/wall/drain etc., complete as per Specifications & as per the direction of EIC of the work.							
	40mm ϕ GI pipe	m	1	4			4.00	
	@ Rs 320.00						—	1280.00
	Item No 21: Supplying & fixing LT cast iron pot head suitable for							

Contents	Reference to last Measurement
7	8
30.00	
—	2250
um duty) GI pipe	
wall / drain	
uction & EIC of	
4 w	
—	1280.00
ad suitable for	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 498724

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work	Unit	Dimensions: Number	Length	Breadth	Depth	Contents	Reference to last Measurement
2		3	4	5	6	7	8
11 kV class UG Cable filled with necessary bitumen/insulating compound etc, complete as per Specification & as per direction & EIC of the work.	NO	1				1	
@ Rs 280.00						—	280.00
Item NO 22 : Supplying & fixing, wiring, earth electrode for grounding conduits, IC outouts & other equipments on the meter board using 40mm ϕ 2.5mm thick GI pipe 2.5m long buried in pit etc., complete as per Specification & EIC of the work.	NO	1				1	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measureme
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	@ Rs 2500.00					—	2500.00
	Item No 23: Supplying & fixing of porcelain fuse channel with cutout on existing wooden/ panel using necessary nuts, bolts. & washer etc., complete as per specifications & as per direction of the EIC of the work.						
	32Amps	NO	1x6			6	
	@ Rs 170.00					—	1020.00
	Item No 24 : Providing & fixing in position 50mm nominal bore gun metal non return valve horizontal type of approved make including cost & all materials etc. complete as per specification						

ntents	Reference to last Measurement
7	8
—	2500·00
hannel with uts, bolts. per direction's	
—	1020·00
nominal base ed make specification	

M. A. R. 57 (Rule 116)
Measurement Book

No. B

498725

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
2	Number 3	Length 4	Breadth 5	Depth 6	7	8
Unit-						
As per Estimate of the work.						
NO	1				1	
@ Rs 1500·00					—	1500·00
Item No 25: Providing NP/CP waste unions conforming to ISI Specifications & fixing them in position as per directions & complete as per specifications & as per Estimate of the work						
NO	1				1	
@ Rs 200·00					—	200·00

MEASUREMENT BOOK

Date	Full description, etc, of work	Unit	Dimensions				Contents	Reference to last Measurement
			Number	Length	Breadth	Depth		
1	2		3	4	5	6	7	8
	Item No 26 : Supplying & fixing 50mm ϕ G.I. nipple with ISI mark with all lead & lift loading unloading & labour etc. complete & as per the directions of the EIC of the work							
	@ Rs 90.00	NO	1	4.00			4.00	360.00
	Item No 27 : Supplying Shunt capacitors conforming to IS 2834, 3 phase 400/400 volts grade for power factor improvement of rotating machines etc complete & as per the directions of EIC of the work							
	@ Rs 1400.00	NO	1				1	1400.00

nts	Reference to last Measurement 8
with ISI mark etc. complete	
	360.00
to IS 2834, rument for & E/C of the work	
—	1400.00

M. A. R. 57 (Rule 116)
Measurement Book

No. B

498726

..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Full description, etc, of work 2	Unit	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
Item No 28: Supplying & fixing miniature circuit breakers/ isolaters in existing MCB distribution boards using necessary fixing materials etc., complete as per specification & as per direction of E/C of the work	No	1				1	
@ Rs 400.00						—	400.00
Item No 29: Fabrication supplying & mounting MS box of 16 SWG suitable for floor wall/ mounting fully weather proof with provisions for better heat dissipation, provided with hinged front cover, equipped with tamper proof etc., complete as per specification & as per direction of E/C of the work							

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Unit	Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	16 SWG Sqcm	1X 2	120.00	60		14400.00	
		1	360.00	25		9000.00	
						23400.00 Sqcm	
	@ Rs 0.25 —					—	5850.00
	Item No 30 : Supplying fully automatic star delta starter unit push button type with suitable wires three contactors one adjustable thermal timer mounted on a common base plate holdin steel enclosure for use in 440/400volts etc., complete as per specifications & directions of Elec g the work.						
	No	1				1	
	@ Rs 8000.00					—	8000.00

M. A. R. 57 (Rule 116)
Measurement Book

No. B

498727

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
2	Number 3	Length 4	Breadth 5	Depth 6	7	8
Item No 31: Earthwork excavation for pipeline trenches including depositing it bank upto a depth of 50 m etc., complete as per directions of the EIC of the work. Qty vide recorded as per pre measurements vide page No 498776 to 498777 of this MB cum	1				225 cum.	
@ Rs 165-00 × 225.					=	37125-00.
Item No 32: Providing & installation at site of works PVC pipes including cost of pipes & Specials & including lowering into Trenches, laying true to line, level & perfect linking at joints etc. complete as per directions of EIC						

Depth 6	Contents 7	Reference to last Measurement 8
	14400·00	
	9000·00	
	23400·00 Sqm	
	—	5850·00
	1	
	—	8000·00

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	the work. m						
	75mm ϕ GKSC PVC pipe	1	500.00			500.00	
	@ Rs 160.00					=	80000.00
	Item No 33: Refilling the burrow & pipeline trenches with selected available earth for trench excavation including authority condition in layers from Theli including dispensary of the surplus earth with a heavy 200 nts with all lead & lift etc., complete as per specification & as per direction of the EIC of the work.						
	Qty same as wide item No 31.						
	Item	1				225.00 cum	
	@ Rs 50.00					—	11250.00

M. A. R. 57 (Rule 116)
Measurement Book

No. B 498728

Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Contents	Reference to last Measurement
7	8
500.00	
=	80000.00
in trenches with	
including authority	
nsary of the	
head & lift etc.,	
the Etc of the work.	
225.00 Rm	
—	11250.00

Full description, etc, of work	Unit	Dimensions: Number	Length	Breadth	Depth	Contents	Reference to last Measurement
2		3	4	5	6	7	8
Item No 34: Providing & fixing in position brass gate valve with C.I wheel of approved quality (Screwed end) 50 mm nominal bore including cost of all materials, labour etc., complete as per specification & as per direction & Etc of the work.	NOS	5				5 =	10000.00
@ Rs 2000.00							
Item No 35: Supply of drinking water thro water tankers of capacity 6000 liters. (Including hiring of water tanker, Hiring of Tractor 40 HP							

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Unit-	Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Procurement of water & Engaging casual labours).						
	Rs 512.00 / Load. (As per estimate)						
	Considering 8 Loads / day = 8 X 103 days = 824 loads						
	@ Rs ~~512~~ @ Rs 480.00 / Load						
		824 X 480				=	395520.

Contents	Reference to last Measurement
7	8
bours).	
oads	
=	395520.

M. A. R. 57 (Rule 116)
Measurement Book

No. B

498723

Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Number	Length	Breadth	Depth		
2	3	4	5	6	7	8
Unit-						
Desilting of drains.						
Item No 36: Hire charges of JCB excavator including operator & fuel etc complete as per specification & Directions of EIC of the work.						
	Days 20				20	
@ Rs 5000.00					=	100000.00

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Unit	Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO 37 : Hire charges of tractor 50 HP including operator fuel etc complete as per specifications & directions of EIC of the work						
	Day	1 x 136 days				136	
	@ Rs 2100					= 285600.00	
	Item NO 38 : Engaging casual labours (unskilled mazdoor heavy) etc., complete as per Specification & direction of the EIC of the work						
	Nos	10	for 136 days			1360	

Contents	Reference to last Measurement
7	8
including operator	
ions of EIC of the	
136	
= 285600.00	
ed mazdoor	
ruction of the	
1360	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 498730

..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Number	Length	Breadth	Depth		
2	3	4	5	6	7	8
@ Rs 230.00					= 312800.00.	
					Total = 1752543.00.	
Certificate: Certified that the above work done satisfactorily & no materials were issued from department. Sweetha.N.R 21/10/19.						

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97
21/10/19